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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,342	03/26/2004	Joseph Milton Graham	8C20.1-270	1575

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2018 POWERS FERRY ROAD
SUITE 800
ATLANTA, GA 30339

EXAMINER

SAMS, MATTHEW C

ART UNIT	PAPER NUMBER
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2617

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/811,342

Applicant(s)

GRAHAM ET AL.

Examiner

Matthew C. Sams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2617

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Information Disclosure Statement

2. The information disclosure statement filed on 3/26/2004 has been considered.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 22-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 22-25, the claims recite a "computer program" being "embodied on a computer readable medium", however the body of the claim is limited to the program and fails to breath life or meaning into the "readable medium" limitation of the preamble, thus effecttively claiming a program per se failing to provide any structural and functional interrelationships between the program and other claimed elements of the computer which would permit the functionality of the program to be realized and thus are non-statutory. The examiner suggests instead claiming, "A computer readable medium encoded with a computer program for forecasting growth..." and thereby claiming a statutory computer element containing the program.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by lizuka (US-6,246,880).

Regarding claim 1, lizuka teaches a method of forecasting growth in a wireless telecommunications system where the telecommunications system includes a plurality of system sectors (Fig. 1 [Cell A-H]) comprising determining the current system traffic for the wireless telecommunications system (Fig. 5 [530]), determining the current minutes of use (MOU) for the wireless telecommunications system (Fig. 5 [530]), estimating the future MOU for a first period of time for the wireless telecommunications system (Fig. 5 [540]), and forecasting the future system traffic for the wireless telecommunications system based on the current system traffic, the current system MOU and the future MOU. (Fig. 5 [580] and Col. 6 lines 19-35)

Regarding claim 2, lizuka teaches allocating the future system traffic to the plurality of system sectors. (Fig. 6 [600])

Regarding claim 3, lizuka teaches allocating the future traffic levels to their corresponding sectors based upon the current traffic levels and their corresponding sectors. (Col. 6 lines 7-17)

Regarding claim 4, lizuka teaches the allocating step further comprises determining future equipment requirements for at least one of the plurality of system sectors. (Fig. 6 [640 & 650])

Regarding claim 5, lizuka teaches the step of determining the impact of proposed relief sectors for the system. (Col. 12 lines 17-43 and Fig. 6 [600])

Regarding claim 6, lizuka teaches evaluating sector capacities relative to the available spectrum and the balance between coexisting technologies. (Col. 12 lines 17-43 and Col. 12 line 55 through Col. 13 line 3)

Regarding claim 7, lizuka teaches determining the average traffic per sector per time period for at least one of the plurality of sectors. (Fig. 3 [310, 320, 335 & 340])

Regarding claim 8, lizuka teaches the MOU of the wireless telecommunications system includes MOU during peak time periods (Fig. 3 [320]) and MOU during non-peak time periods (Fig. [310]) and the basis for determining future MOU in the future MOU estimating step includes a growth factor for MOU during peak time periods. (Fig. 5 [570] and Col. 8 line 23 through Col. 9 line 60)

Regarding claim 9, lizuka teaches the growth factor includes a ratio of an individual sector busy hour Erlang growth factor to an MOU growth factor. (Col. 7 lines 43-62)

Regarding claim 10, lizuka teaches the future MOU estimating step further comprises estimating the future MOU in such a way that the resulting MOU estimation includes an MOU buffer amount. (Col. 6 lines 19-35)

Regarding claim 11, lizuka teaches that at least one of the current system traffic determining step and the current MOU determining step includes determining the

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number of current subscribers for the wireless telecommunications system. (Col. 6 lines 7-35)

Regarding claim 12, lizuka teaches the future MOU estimating step includes estimating the number of future subscribers for the wireless telecommunications system. (Col. 5 line 55 through Col. 6 line 35)

Regarding claim 13, lizuka teaches the estimating of the number of future subscribers for the wireless telecommunications system includes estimating the number of future subscribers in such a way that the resulting number of future subscribers includes a subscriber buffer amount. (Col. 6 lines 19-35)

Regarding claim 14, lizuka teaches the method comprises forecasting growth in a wireless telecommunications system that uses a plurality of wireless transmission technologies, wherein the current system traffic determining step, the current MOU determining step, the future MOU estimating step and the forecasting step all are performed for at least one of the plurality of wireless transmission technologies. (Col. 3 lines 33-54 and Col. 5 line 56 through Col. 6 line 35)

Regarding claim 15, lizuka teaches the plurality of wireless transmission technologies includes AMPS, IS-136, TDMA, GSM or CDMA. (Col. 3 lines 33-54)

Regarding claim 16, lizuka teaches the method comprises forecasting growth in the wireless telecommunications system for a first time period, wherein the future MOU estimating step comprises determining future MOU for the first time period and the future data traffic forecasting step comprises forecasting future system traffic based on the future MOU for the first time period, the current data traffic and the current MOU. (Col. 5 line 56 through Col. 6 line 65)

Regarding claim 17, lizuka teaches an apparatus for forecasting growth in a wireless telecommunications system wherein the wireless telecommunications system includes a plurality of system sectors (Fig. 1 [Cell A-H]) comprising, a computer, with a processor that executes instructions, a memory device for storing the instructions and an input device for receiving the input data. (Col. 5 lines 9-28 and Col. 9 lines 31-51) lizuka teaches instructions to determine the current system traffic for the wireless telecommunications system (Fig. 5 [530]), determining the current minutes of use (MOU) for the wireless telecommunications system (Fig. 5 [530]), estimating the future MOU for a first period of time for the wireless telecommunications system (Fig. 5 [540]), and forecasting the future system traffic for the wireless telecommunications system based on the current system traffic, the current system MOU and the future MOU. (Fig. 5 [580] and Col. 6 lines 19-35)

Regarding claim 18, the limitations of claim 18 are rejected as being the same reason set forth above in claim 3.

Regarding claim 19, the limitations of claim 19 are rejected as being the same reason set forth above in claim 4.

Regarding claim 20, the limitations of claim 20 are rejected as being the same reason set forth above in claim 5.

Regarding claim 21, the limitations of claim 21 are rejected as being the same reason set forth above in claim 6.

Regarding claim 22, the limitations of claim 22 are rejected as being the same reason set forth above in claim 17.

Regarding claim 23, the limitations of claim 23 are rejected as being the same reason set forth above in claim 2.

Regarding claim 24, the limitations of claim 24 are rejected as being the same reason set forth above in claim 5.

Regarding claim 25, the limitations of claim 25 are rejected as being the same reason set forth above in claim 6.

Regarding claim 26, the limitations of claim 26 are rejected as being the same reason set forth above in claim 17.

Regarding claim 27, the limitations of claim 27 are rejected as being the same reason set forth above in claim 2.

Regarding claim 28, the limitations of claim 28 are rejected as being the same reason set forth above in claim 4.

Regarding claim 29, the limitations of claim 29 are rejected as being the same reason set forth above in claim 5.

Regarding claim 30, the limitations of claim 30 are rejected as being the same reason set forth above in claim 6.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US-6,539,221 to Vasudevan et al. regarding automated wireless network design.
- US-6,275,695 to Obhan regarding spectrum yield management in a wireless communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCS
6/15/2006


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